

A process for preparation of nutritionally upgraded oilseed meals which are protein and lipid-rich and have a reduced fibre content, and plant oils from oilseeds for use in fish or other non-human animal diets or human foods comprising the steps of: providing a source of oilseed; subjecting the oilseed to heat treatment to substantially reduce the concentration of at least some antinutritional components normally present in the oilseed to obtain heat-treated seed; dehulling the heat-treated seed to produce a meat fraction, a hull fraction or a mixture thereof; and cold pressing the meat fraction or the mixture to yeild the plant oils and the protein and lipid-rich meals.